TECHNICAL MEMORANDUM CH2MHILL

Field Sampling Plan Addendum 3, Area Northeast of the Leading Edge of OU-2 Plume

Omega Chemical Corporation Superfund Site, Operable Unit 2

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This Sampling and Analysis Plan (SAP) Addendum 3 has been prepared to support the U.S. Environmental Protection Agency (EPA) in conducting a feasibility study (FS) for the Omega Chemical Superfund Site Operable Unit 2 (OU-2).

This Addendum is a supplement to the existing Field Sampling Plan (FSP), *Field Sampling Plan for Omega Chemical Superfund Site Operable Unit 2 Remedial Investigation/Feasibility Study, Addendum 1* (CH2M HILL, 2006a) and *Quality Assurance Project Plan (QAPP) for Omega Chemical Superfund Site Operable Unit 2 Remedial Investigation/Feasibility Study, Addendum 1* (CH2M HILL, 2006b). Addendum 1 was prepared to supplement 2004 SAP (CH2M HILL, 2004a and 2004b). Several Addenda were prepared as part of this additional investigation at OU-2; only relevant Addenda are discussed herein. Addendum 3 was developed in accordance with *EPA Region IX, Guidance for Preparation of a U.S. EPA Region IX, Field Sampling Plan for EPA-Lead Superfund Projects* (EPA, 1993). Since this Addendum is a supplement to the existing FSP, not all sections are included as required in the EPA Guidance.

The Remedial Investigation (RI) characterized the extent of the OU-2 plume. However, since the future Remedial Action (RA) is likely to include groundwater extraction which may capture groundwater from outside OU-2, further investigation is necessary. The RA remedy is expected to include a pump and treat system for shallow groundwater in this area.

Addendum 3 addresses investigation of groundwater quality in the area northeast of the leading edge of the OU-2 plume. Field activities include shallow direct-push (Hydropunch®) sampling at six locations. The purpose of this sampling is to characterize groundwater quality near the leading edge of OU-2 to aid evaluating treatability options in the FS. Hydropunch® sampling procedures and methods are explained in detail in Addendum 1.

Hydropunch® Sampling Locations Near the Leading Edge of OU-2

The Hydropunch® sampling technique is proposed for this investigation because it has been successfully used at OU2 during the RI investigation. The sampling depths, locations, and results are presented in the Remedial Investigation (RI) Report, *Draft Remedial Investigation Report, Omega Chemical Corporation Superfund Site Operable Unit 2* (CH2M HILL, 2009). Figure 1 shows the six planned Hydropunch® locations near the leading edge of OU-2. These locations will help characterize groundwater quality to assist the evaluation of treatability options in the FS. The locations may be changed based on site access while still allowing adequate characterization of the groundwater quality in this area.

Laboratory Analysis

The Hydropunch® groundwater samples will be analyzed for VOCs, SVOCs, and 1,4-dioxane. The analytical methods are further described in Addendum 1 (CH2M HILL, 2006a and 2006b). Analysis for general chemistry and other water quality parameters was performed under the RI; these parameters do not vary significantly at OU2 and the collection of additional data is not considered necessary.

References

CH2M HILL. 2004a. *Field Sampling Plan for Omega Chemical Superfund Site Operable Unit 2 Remedial Investigation/Feasibility Study*. Prepared for the U.S. Environmental Protection Agency. July.

CH2M HILL. 2004b. *Quality Assurance Project Plan Omega Chemical Superfund Site Operable Unit 2 Remedial Investigation/Feasibility Study*. Prepared for the U.S. Environmental Protection Agency. July.

CH2M HILL. 2006a. *Field Sampling Plan for Omega Chemical Superfund Site Operable Unit 2 Remedial Investigation/Feasibility Study Addendum 1*. Prepared for the U.S. Environmental Protection Agency. November.

CH2M HILL. 2006b. *Quality Assurance Project Plan Omega Chemical Superfund Site Operable Unit 2 Remedial Investigation/Feasibility Study Addendum 1*. Prepared for the U.S. Environmental Protection Agency. November.

CH2M HILL. 2009. *Draft Remedial Investigation Report, Omega Chemical Superfund Site Operable Unit 2*. Prepared for the U.S. Environmental Protection Agency. March.

U.S. Environmental Protection Agency. 1993. *EPA Region IX Guidance for Preparation of a U.S. EPA Region IX Field Sampling Plan for EPA-Lead Superfund Projects.*

Legend

- MW-30
- Hydropunch (2007)
- Potential New Hydropunch
- Water Level Contours July-August 2007
- Facility Boundary

N

0 700 1,400 Feet

Figure 1
SAP Addendum 3
Potential Hydropunch Locations
Near the Leading Edge of OU-2
Omega Chemical Superfund Site

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Date: 6/2/2009

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